

AWPTING AN ELECTRICAL CODE REGULATING THE INSTALLATION, OPERATION, AND MAINTENANCE OF ELECTRIC WIRING AND ELECTRICALLY OPERATED APPLIANCES TO BE CONNECTED THERE TO BY ADOPTING BY REFERENCE THE "UNIFORM ELECTRICAL CODE", 1953 EDITION, WHICH IN TURN ADOPTS BY REFERENCE THE "NATIONAL ELECTRICAL CODE", 1953 EDITION, ESTABLISHING RULES AND REGULATIONS IN CONNECTION THEREWITH, AND REPEALING ORDINANCE NO. 488.

The City Council of the City of Lodi does ordain as follows:

SECTION 1

Each and every provision of the "Uniform Electrical Code", 1953 Edition, and the "National Electrical Code", 1953 Edition are hereby adopted and by this reference are incorporated in and made a part of this Ordinance and shall obtain in all matters pertaining to the installation, operation, and maintenance of electrical wiring and of all electrically operated appliances connected thereto and therewith, save and except the following:

EXCEPTION (a): The words "Building Official" shall be substituted for the words "Chief Electrical Inspector" wherever said words appear in said "Uniform Electrical Code."

EXCEPTION (b): Section 3 on page 4 shall be amended to include the following additional statement:

"For all residence units there will be a fee based on \$0.004 per square foot of floor area."

SECTION 21.

Not less than three copies of said "Uniform Electrical Code" and said "National Electrical Code", all certified to be true copies by the City Clerk, have heretofore been filed with the City Clerk of this City in compliance with Section 550022.6 of the Government Code of this State.

SECTION 30.

(a) The name and address of the Agency promulgating the Primary Code is Pacific Coast Electrical Association, Inc., 681 Market Street, San Francisco, California, and that said Code was published in 1953.

(b) The name and address of the Agency promulgating the Secondary Code referred to in the "Uniform Electrical Code" is National Board of Fire Under-

writers, 465 California Street, San Francisco 4, California, and that said Code was published November, 1953.

(c) The Primary Code referred to in this Ordinance is the "Uniform Electrical Code," 1953 Edition, and a description thereof which the City Council deems sufficient to give notice to interested persons of the purpose of the Primary Code is as follows: Said Code describes the duties of the Building Official, requires the issuance of permits for installation of electrical wiring, etc., sets fees for the issuance of permits, provides inspection and certificates to be issued, and adopts by reference the provisions of the "National Electrical Code".

(d) The Secondary Code herein referred to is the "National Electrical Code", 1953 Edition, and a description thereof which the City Council deems sufficient to give notice to interested persons of the purpose of the Secondary Code is as follows: The purpose of this Code is the practical safeguarding of persons and of buildings and their contents from hazards arising from the use of electricity for light, heat, power, radio, signalling, and for other purposes. It covers the electric conductors and equipment installed within or on public and private buildings and other premises, including yards, carnival and parking lots, and industrial substations; also, the conductors that connect the installations to a supply of electricity, and other outside conductors adjacent to the premises.

#### SECTION 4.

The following rules and regulations for the construction and installation of electrical wiring and equipment are hereby adopted:

#### PLAN AND USE OF THE RULES

(a) These rules and regulations are intended to be used in combination with the National Electrical Code and wherever an "Article Number" is **used** it refers to an article of the National Electrical Code, which is the primary standard upon which these rules are based. In a large measure the rules herein contained consist, in effect, of specific interpretations of the meaning and intent of various rules of the National Electrical Code, many of which are necessarily expressed in brief and general terms. The more definite rules tend to avoid diverse interpretations and consequent misunderstandings in application and enforcement.

(b) It should be clearly understood that these rules and regulation do not constitute complete specifications for electrical work or installations. They simply prescribe and establish a reasonable minimum standard of safety. Inspections are made only for the purpose and to the extent of determining that the minimum requirements have been met.

In planning an electrical installation it is urgently recommended that future extensions or increases of load be anticipated when possible, and that provisions be made for them in the initial installation-- particularly in respect to services, subfeeders and distribution centers. The cost of making such provisions in the initial installation is usually small as compared with the cost of future reconstruction or replacements.

(c) Nothing in the rules and regulations herein contained shall be construed to waive or set aside, but said rules and regulations shall be supplementary to, and in addition to, any provision or requirement with respect to electrical work, or the construction, installation, protection, operation, repair or maintenance of electrical equipment that may be contained in any law of the State of California, or in any order, rule or regulation of the State Public Utilities Commission or of the Industrial Accident Commission.

#### ARTICLE 210--BRANCH CIRCUITS

2115-a Lighting and Appliance Circuits. (Addition) For general illumination in single and multi-family dwellings, not **less** than one branch circuit shall be installed for each 500 square feet of floor area in addition to the receptacle **circuits** called for in paragraph b, below.

~~2115-b~~ Receptacle Circuits. (Dwelling Occupancies). (Amendment) For the small appliance load in kitchen, laundry, pantry, dining room and breakfast room of dwelling occupancies, one or more branch circuits shall be provided for all

receptacle outlets (other than outlets for clocks) in these rooms and such circuits shall have no other outlets. The conductors of such circuits shall be not smaller than No. 12 and shall be limited to 6 outlets per circuit. At least one circuit shall be provided for laundry equipment with only one outlet on this circuit and the conductors of this circuit shall not be smaller than No. 12.

**2116. Calculation of Load.** (Amendment)

**c.1. Ranges.** For household electric ranges, the branch circuit load shall be computed in accordance with Table 29, Column A only. A 50 ampere branch circuit shall be provided for each such range installation.

**c.2. Show-Window Lighting.** For show-window lighting a load of not less than 200 watts for each linear foot of show-window measured horizontally along its base shall be included. If no outlets are installed, a raceway of proper size for this capacity shall be installed from the panel to the window area.

**2121. Conductors.** (Amendment)

**b. Minimum size.** All conductors supplying household ranges shall not be smaller than No. 6.

**2124. Receptacle Outlets Required.** (Additions)

**A. General.** In order to keep cord wiring and its accompanying hazard to a minimum, all portable-type neon signs, phonographs, pinball machines and equipment of a like nature shall be wired with not more than 36 inches of flexible cord. In the event there are existing receptacles, this limitation may be increased to 6 feet.

**c. Bathroom Receptacle.** One plug receptacle shall be provided in each bathroom, connected to the outlet circuit.

**d. Show-Windows.** At least one receptacle shall be installed directly above a show-window for each 20 linear feet or fraction thereof of show-window area measured horizontally along its base.

**e. Lighting Outlets Required (Entrance Lighting).** One light outlet shall be provided at front and rear entrances to a building intended for residential or commercial occupancy.

**ARTICLE 220--FEEDERS.**

**2203-d. Electric Ranges.** (Amendment) The feeder load for household electric ranges shall be computed in accordance with Table 29, Column A.

**2203-g. Neutral Feeder Load.** (Amendment) The neutral feeder load shall be the maximum unbalance of the load to which it may be subjected.

**ARTICLE 230--SERVICES**

**2300. Character of Service.** (Addition) 120-volt single-phase lighting installations may be wired and arranged for 2-wire service if the load to be supplied does not exceed two 15-ampere or two 20-ampere branch circuits. Larger installations shall be wired for 3-wire service.

**2304-a. Service-Entrance Conductors.** (Addition) The neutral conductors shall be of a size to carry the maximum unbalanced load to which it may be subjected.

**2324. Point of Attachment to Building.** (Amendment). The location of the point of service-drop support or attachment on a building shall be that portion of the building facing and nearest to the street, alley, easement, or public way on which is located the utility's pole having facilities for rendering service of the type required to fit the needs of the particular installation involved.

The service head shall in all cases be located at such height on the building that will permit the utility to maintain the vertical clearances prescribed in General Order No. 95, California Utilities Commission, governing service drops which may cross above streets, highways, alleyways, driveways and walkways. This will require that the service head in residential occupancies be located at 12' 6" above the ground where service drops may cross a private driveway and 10' 6" above the ground in areas accessible to pedestrians only.

2331. Service Conductors on or in Buildings. Wiring Methods. (Amendment).

- a. All service—entrance conductors shall be installed in approved rigid metal conduit.
- b. Where service conduit passes into the wall, roof, or other portion of any building it shall be installed so as to effectively prevent leakage of water into the building around the conduit.
- c. The outer or upper end of overhead service conduit shall not overhang or project horizontally more than 18 inches beyond the last point at which the conduit is supported and fastened.

In cases where it is necessary to obtain the required clearance heights for the support of service drops by extending the service conduit through the roof of a building, only rigid metal conduit shall be used for this purpose and shall not be smaller than one and one-quarter inches ( $1\frac{1}{4}$ " ) trade size nor extend more than 30 inches beyond the last support.

- d. Where service is run on the exterior of buildings having plastered exterior finish, the conduit shall be so installed that it will not be wholly or partially embedded in the plaster. Such surface run of conduit shall preferably be installed after the last coat of plaster has been applied, but may be installed before the last coat of plaster is applied if the conduit is neatly secured in place with galvanized metal hangers or fastenings or other approved means (not wooden blocks) that support it away from the sheathing so as to permit the required thickness of plaster to be spread underneath.

- e. The length of the service conduit within a building shall be as short as is reasonably practicable and shall in no case exceed 30 linear feet.

2351. Service Disconnecting Means. (Addition). The service switch shall be located at a readily accessible point nearest to the entrance of the service conductors, and in residential property shall be accessible from the exterior, except where a meter room is provided. Service switches shall not be installed under show windows or at any location above the ground floor level or in the case of multiple occupancies in any location not readily accessible to all parties concerned. The center of the grip of the service switch handle when in its highest position shall not be more than six and one-half feet ( $6\frac{1}{2}$ ' ) above the floor or working platform.

A separate service—disconnect switch shall be provided for each separately metered subdivision of the service conductors.

2357. Rating of Service Switch. (Amendment). Service switches serving single—family and duplex—type dwellings shall have a carrying capacity of not less than 60 amperes in cases where fused switches are to be used; and shall be not less than 50 amperes where circuit breakers are employed. In all other types of occupancies the rating of the service switch shall be determined in accordance with Section 2203.

ARTICLE 240—OVERCURRENT PROTECTION.

2435. Location in Premises. (Addition). In new installations, not more than two sub-feeder or branch—circuit cutouts shall be installed on the load side of any meter in any meter—cabinet opening to the exterior of a building. For a larger number of cutouts, a distribution center shall be provided at a suitable location within the building. Exception to this rule will be granted in cases involving the installation of electric ranges, water heaters, and electrically heated clothes dryers, provided that the overcurrent protective devices are contained within a single panelboard assembly approved for the purpose.

In apartment houses and other buildings of multiple occupancy, branch circuit overcurrent devices which are located in an apartment or portion of the building intended to be separately occupied by one tenant will not be considered as being

readily accessible if they protect circuits supplying any outlets or equipment located in an apartment or portion of the building intended to be occupied by some other tenant. The overcurrent device may be located in a commonly accessible location but all circuits supplying individual apartments in multi-family dwellings shall be confined to each individual apartment served. In remodel jobs where this is impracticable, exceptions may be granted by the authority enforcing the code.

~~ARTICLE 250--GROUNDING.~~

2543. Fixed Equipment - Specific. (Amendment).

F. Electric signs and associated equipment shall be grounded.

2559. Portable Equipment. (Amendment). All plugs and receptacles used for attachment of equipment required to be grounded shall each have an additional contact by which the ground connection for the non-current carrying metal parts will be established automatically when the circuit plug is inserted. Separate plugs for making the grounding connection will not be approved.

2574. Voltages Exceeding 150 Volts. (Amendment). The requirements of the National Electrical Code, Section 2574, shall apply to all raceway systems of metal, regardless of the voltage of the conductors contained therein.

2582. Other Available Electrodes. (Amendment). Gas pipe will not be approved as a grounding electrode. No other pipe or structure containing flammable substance and no metal covering on a metal clad building shall be used as a grounding electrode or conductor.

2615. Ground Clamps. (Amendment). The clamp for the grounding conductor on the grounding electrode shall be of the malleable or cast type.

ARTICLE 300--GENERAL REQUIREMENTS FOR WIRING METHODS

3007. Boxes at Outlets. (Addition). All boxes larger than  $3\frac{1}{4}$  inches shall be fitted with an approved raised plaster ring, for concealed work, with the exception of concrete slab work.

ARTICLE 324--CONCEALED KNOB-AND-TUBE WORK

3242. Use. (Amendment). Concealed knob-and-tube work may only be used in the hollow spaces of walls and ceilings of wood frame construction and must be concealed by the permanent finish of the building. It shall not be used (1) in commercial garages, (2) in theaters, except as provided in Section 5211, (3) in motion picture studios, (4) in hazardous locations, nor (5) in Fire Zone No. 1. Concealed knob-and-tube wiring is limited to use on circuits not exceeding 300 volts between conductors or 150 volts to ground.

~~ARTICLE 334--ARMORED CABLE~~

a. Use. (Amendment). Armored cable may only be used for concealed or exposed work in wood frame construction, or by special permission in other locations where other wiring methods are impracticable. It is limited to use on circuits not exceeding 300 volts between conductors or 150 volts to ground. Armored cable may not be installed in Fire Zone No. 1.

ARTICLE 336--NON-METALLIC SHEATHED CABLE

3362. Use. (Amendment). Non-metallic sheathed cable is limited to use on circuits not exceeding 300 volts between conductors or 150 volts to ground. Non-metallic sheathed cable may not be installed in Fire Zone No. 1, or any structure classified as commercial or industrial, located outside Fire Zone No. 1.

3367. In Accessible Attics. (Amendment). Cable in accessible attics or roof spaces shall be bored or protected by approved means.

ARTICLE 348--ELECTRICAL METALLIC TUBING.

3482. Use. (Addition). Shall not be used in the ground floor slab, or in any location where it would be in contact with the ground.

ARTICLE 350--FLEXIBLE METAL CONDUIT.

3502. Use. (Amendment). Shall only be used where the use of rigid metal conduit is impractical.

ARTICLE 370--OUTLET, SWITCH AND JUNCTION BOXES, AND FITTINGS.

3709. Number of conductors & &. (Addition). Ceiling and wall bracket lighting outlet boxes used in concealed work with rigid conduit, electrical metallic tubing, armored cable, or non-metallic sheathed cable, shall be at least 4 inches in size.

ARTICLE 380--SWITCHES.

3803. Enclosures. (Addition). An auxiliary wiring gutter shall be provided when there are more than two self-contained enclosed switches to be supplied through one set of conductors. No conductors shall pass through any switch case, except the conductors feeding to or controlled by that particular switch.

3808. Accessibility and Grouping. (Amendment). All switches, circuit breakers, fuses and other protective devices shall be so located that they may be operated, renewed, or repaired from a readily accessible place. They shall be so installed that the top of the fuse or the center of the grip of the operating handle of the switch, circuit breaker or other control device when in its highest position will not be more than 6½ feet from the floor or working platform.

ARTICLE 384--SWITCHBOARDS AND PANEL-BOARDS.

3851. Location of Switchboards. (Amendment). Lighting distribution panels shall be approved dead front type and shall be within the building or apartment being supplied from same. All switchboards or panelboards shall have adequate illumination for safety of operation or repair.

The lights and switches used for the control of such illumination shall be so located that they will be readily and safely accessible.

3886. Identification of Switches and Cutouts. (Addition). On panelboards and switchboards the switches, and the cutouts which they respectively control, shall each be identified by use of a card holder or by painting, stenciling or by other approved means. Where cabinets are used a typed or printed directory shall be provided on the door.

ARTICLE 410--LIGHTING FIXTURES, LAMP HOLDERS, LAMPS, RECEPTACLES AND ROSETTES.

4104. Location and Control of Fixtures. (Addition). Fixtures which are operated through any type of switching device which is part of the lamp holder, such as pull chain sockets, key sockets, or push type sockets, shall not be used in bathrooms, kitchens, laundry rooms, or on the exterior of buildings or structures, or within 8' vertically or 5' horizontally of a grounded surface. Fixtures in such locations shall be controlled by wall switches.

4159. Switch Control of Lampholders. (Addition). Switches shall be provided for the control of keyless lampholders and for the control of lampholders of the switched type that are not within safe and convenient reach.

## ARTICLE 422--APPLIANCES

4222- Branch Circuit Requirements. (Addition) Each electrically heated appliance and each combination motor-driven and electrically heated appliance rated at more than 15 amperes shall be supplied by an individual circuit of one of the types specified in Article 210.

4241- Disconnection Means. (Amendments).

c.1. Multi-Family Dwellings. In multi-family (more than two) dwellings, the disconnecting means shall be within the apartment or on the same floor as the apartment in which the appliance is installed,

c.2. Two-Family Dwellings-; In two-family dwellings, the disconnecting means may be outside of the apartment in which the appliance is installed.

## ARTICLE 430--MOTORS AND CONTROLLERS

4301. General. (Addition). Wiring for all motors rated at 1.h.p. or more shall be installed in rigid metal conduit, electrical metallic tubing or flexible metal conduit.

## ARTICLE 520--THEATERS, INCLUDING MOTION PICTURE HOUSES

5211. Wiring Method. (Amendment). The wiring method shall be metal raceway except as provided in Articles 640 and 800.

## ARTICLE 600--SIGNS AND OUTLINE LIGHTING

6001. Scope. (Addition). These regulations do not apply to erection or matters of a structural nature.

6003. In Sight of Sign. (Amendment). In addition to the switch required by Section 6002 a disconnecting means shall be provided within reach of the sign or outline lighting which it controls.

The switch controlling roof signs shall be located not more than six and one-half feet ( $6\frac{1}{2}'$ ) above the roof.

6007. Marking. (Addition) Every electric sign shall bear the inspection label of the Underwriters' Laboratories. The above requirement may be waived for good cause, such as the minor alteration of an existing sign; this exception will require that the sign bear evidence of approval by the local inspection department,

6021-a. Wiring Methods. (Amendment). Conductors shall be installed only in rigid metal conduit, electrical metallic tubing or approved metal troughing. All raceways shall be terminated with locknuts and busings in the sign structure. Raceways shall not terminate in the bottom of the sign,

6031-a. Wiring Method. (Amendment). Same as outlined in Section 6021-a.

## ARTICLE 700--EMERGENCY LIGHTING

7001. Where required. How Supplied. (Addition). Lights sufficient to properly illuminate every public hallway, passage-way, public stairway, fire escape egress, elevator, public water-closet compartment and toilet room, shall be provided in the following buildings or portions of buildings,



The source of supply shall be as indicated in each instance.

Separate Circuits. A separate circuit or circuits shall be provided for the accommodation of the required emergency lighting in each of the following:

1. Apartment houses containing more than two apartments above the first floor.
2. Hotels not more than two stories in height.
3. Public assemblage not above the second floor.

Separate Service. A separate service shall be required for the emergency lighting supply in each of the following:

1. Apartment houses containing three floors or more.
2. Hotels three stories or more in height.
3. Public assemblage located on the third floor or higher.
4. For all hospitals.

Exit Sign: Every exit doorway from an area with an occupant load of more than 100 persons shall be marked with an exit sign. Exit sign letters shall be at least five inches high.

Illumination of Exit Signs: Shall be lighted with two separate electric lamps of at least twenty watts capacity on separate circuits, one such circuit being separate from any other circuit in the building.

#### ARTICLE 730--OUTSIDE WIRING

7351. Mechanical Protection. (Addition). The use of direct burial type cable will require a minimum depth of 15 inches where not subject to probable mechanical injury or 24 inches under driveways. Other approved means may be substituted under varying conditions.

SECTION 5

Any person, firm or corporation, violating any of the provisions of this Ordinance shall be guilty of a misdemeanor and upon conviction thereof, shall be punishable by a fine of not more than Five Hundred Dollars (\$500.00) or by imprisonment in the City Jail for a period of not more than six (6) months, or by both such fine and imprisonment.

SECTION 6

Every person, firm or corporation violating any of the provisions of this Ordinance shall be deemed guilty of a separate offense for each day or portion thereof during which such violation continued and shall be punishable therefor as herein provided.

SECTION 7


It is unlawful for any person, firm or corporation, either as owner, architect, contractor, artisan or otherwise, to do or knowingly to cause or permit to be done any electrical wiring as defined in this Ordinance in such manner that the same shall not conform to all of the provisions of this Ordinance.

SECTION 8

Ordinance No. 488 and all other Ordinances and parts of Ordinances inconsistent herewith are hereby repealed.

This Ordinance shall be published one time in the Lodi News-Sentinel, Lodi, California, and shall be in force and take effect 35 days after its passage.

Approved this 2nd day of February, 1955.

  
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Mayor

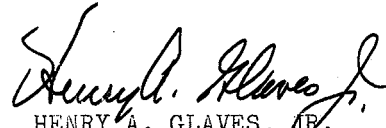
I, HENRY A. GLAVES, JR., City Clerk of the City of Lodi and ex officio Clerk of the City Council of said City, do hereby certify that the foregoing Ordinance No. 519 was introduced in regular meeting of said Council held January 5, 1955, and was thereafter passed, adopted and ordered to print at a regular meeting of the City Council held February 2, 1955, by the following vote:

AYES: Councilmen - Hughes, Mitchell, Robinson and Fuller

NOES: Councilmen - None

ABSENT : Councilmen - Richey

I FURTHER CERTIFY that Ordinance No. 519 was approved and signed by the Mayor on the date of its passage and has been published pursuant to law.

  
HENRY A. GLAVES, JR.  
City Clerk

Dated: February 18, 1955